STEREO POWER AMPLIFIER

KAC-622

INSTRUCTION MANUAL

B64-0027-00

KENWOOD

KENWOOD CORPORATION

FILE

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99/12 11 10 9

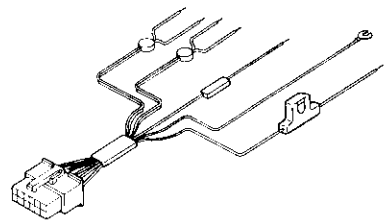
Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new power amplifier.

For your records

Record the serial number found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on this product.

Model KAC-622 Serial number _____

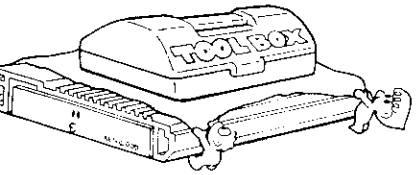
ACCESSORY

No.	Part name	External View	Number of units
①	Power connection cord	 E30-3884-05	1

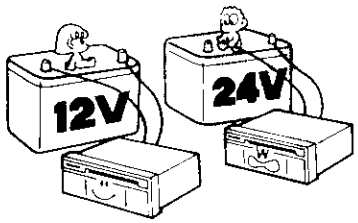
⚠ WARNING

O PREVENT ELECTRIC SHOCK,
RE AND OTHER INJURY.
LEASE NOTE THE FOLLOWINGS:

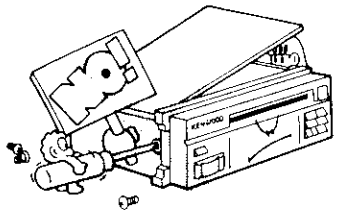
To keep good ventilation, do not anything on top of the unit.



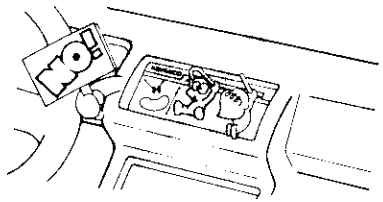
The unit is designed to be connected 12 V DC and negative grounding.



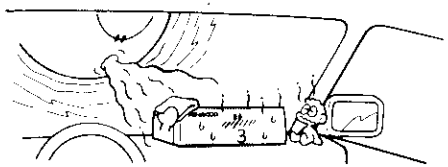
Do not open enclosure, such as front panel, top or bottom cover.



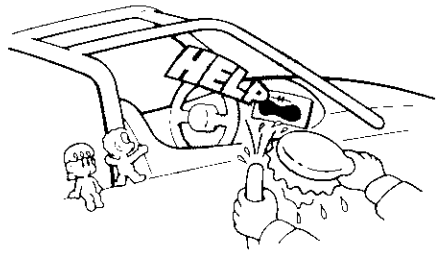
- Do not drop pieces of metal, needles, coins and other electrically conductive materials into the unit.



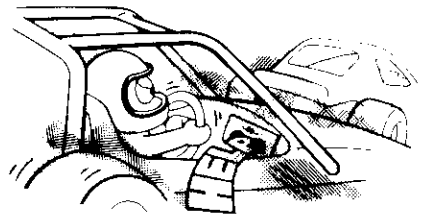
- Do not place the unit, where it will be exposed to direct sunlight or close to heating device.



- Do not dash water on the unit.

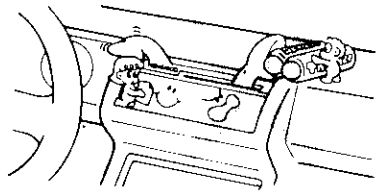


- Do not place the unit in areas of excessive dust, high humidity or on unstable surfaces.

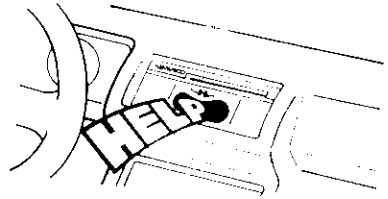


CLEANING

1. Turn the power off, before cleaning the unit.
2. Do not use any type of abrasive pad, thinner, benzine and any such kind of objects.
3. Wipe the front panel and other exterior surfaces of the unit with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.



- If an abnormal smell or smoke is detected, immediately turn the power off.



■ If you have difficulty in installing the set in your car, please contact your KENWOOD dealer

FCC WARNING:

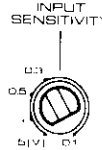
This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

USE OF THE OPERATION PANEL ACCORDING TO SYSTEM TYPE

• Input sensitivity control

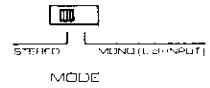
The input sensitivity control adjusts the input sensitivity within a range of 0.1 V to 5.0 V continuously, enabling expansion with various systems.
This unit has been set for 0.3 V.

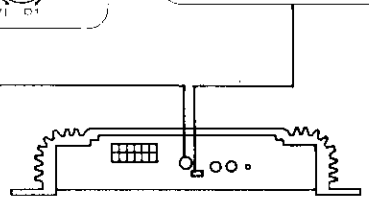
KENWOOD head unit preout level (MAX.)	Amplifier input sensitivity
300 mV	0.1 V
1 V	0.3 - 0.5 V



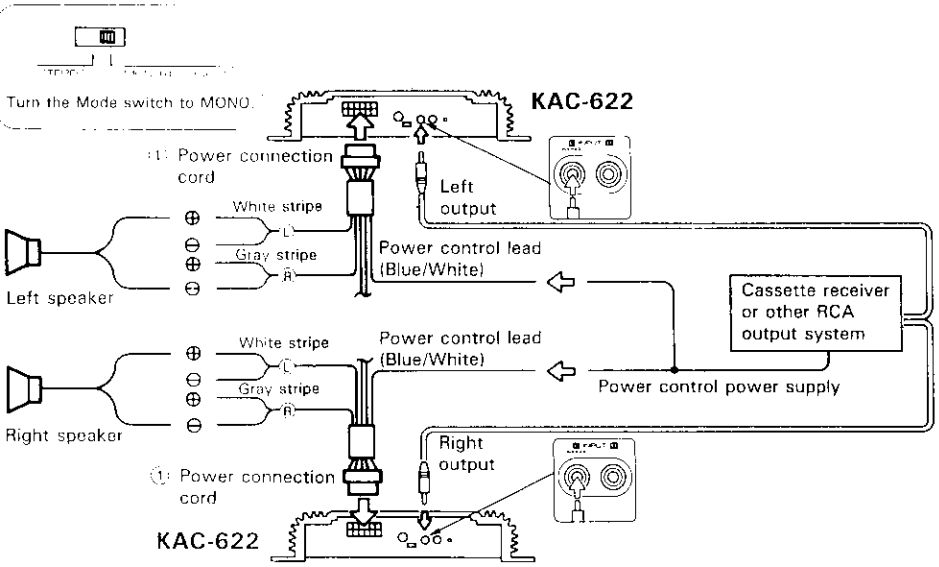
• Mode switch

This switch is used to set the unit's output system to Stereo (Normal) or Mono. (Bridged) as described below.





■ This unit is provided with a bridged output function which enables you to double the unit's power output. Since the output becomes monaural when the bridged output function is used, systems can be configured such as those shown below. (for 4 Ω speakers)

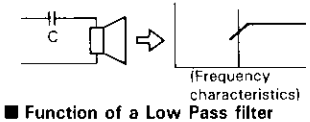


CONSTANT TABLE OF NETWORK FOR 3D

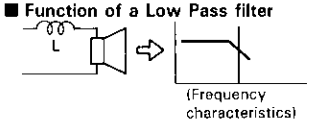
You can construct a multiple speaker system through the use of passive crossovers (coil and capacitors) as shown below: (if the coils and capacitors are not available in the value listed, coils and capacitors with similar or close values can be used without affecting the profo. mance in practical use.

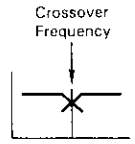
■ 6 dB/Octave for High and Low pass Filter

■ Function of a High Pass filter



■ Function of a Low Pass filter





■ 6 dB/Octave w/Sub Woofer and Full Range Speakers

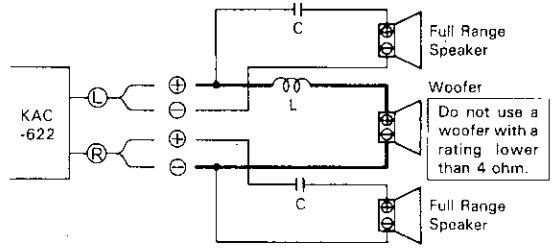


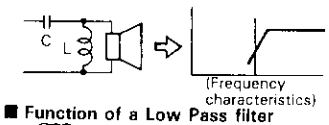
Table of content for 6 dB (4 Ohm)

Cross-over Frequency	L (Coil)	C (Capacitor)
30Hz	21.2mH	1330μF
50Hz	12.7mH	800μF
80Hz	8.0mH	500μF
100Hz	6.4mH	400μF
150Hz	4.2mH	270μF
200Hz	3.2mH	200μF
260Hz	2.4mH	150μF
400Hz	1.6mH	100μF
600Hz	1.1mH	70μF
800Hz	0.8mH	50μF

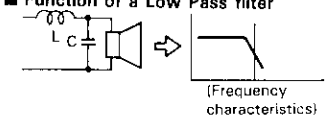
When using a 2 ohm speaker, use half the value of the coil for low pass and use twice the value of the capacitor for high pass.
Example: 30 Hz L = 10.6 mH, C = 2660 μF
When using a 8 ohm speaker, use twice the value of the coil for low pass and use half the value of the capacitor for high pass.
Example: 30 Hz L = 42.4 mH, C = 665 μF

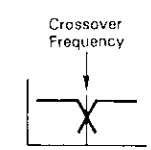
■ 12 dB/Octave for High and Low pass Filter

■ Function of a High Pass filter



■ Function of a Low Pass filter





■ 12 dB/Octave w/Sub Woofer and Full Range Speakers

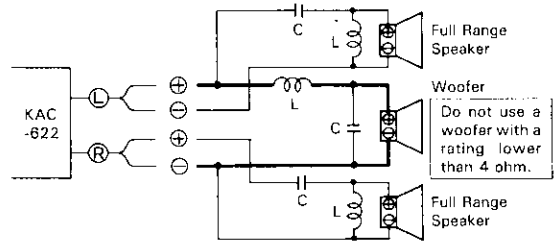


Table of content for 12 dB (4 Ohm)

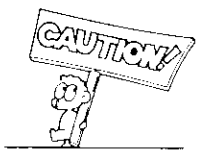
Cross-over Frequency	L (Coil)	C (Capacitor)
30Hz	29.7mH	950μF
50Hz	17.8mH	570μF
80Hz	11.1mH	350μF
100Hz	8.9mH	280μF
150Hz	5.9mH	190μF
200Hz	4.5mH	140μF
260Hz	3.4mH	110μF
400Hz	2.2mH	70μF
600Hz	1.5mH	48μF
800Hz	1.1mH	35μF

When using a 2 ohm speaker, use half the value of the coil for low pass and use twice the value of the capacitor for high pass.
Example: 30 Hz L = 14.9 mH, C = 1900 μF
When using a 8 ohm speaker, use twice the value of the coil for low pass and use half the value of the capacitor for high pass.
Example: 30 Hz L = 59.4 mH, C = 475 μF

CONNECTIONS

■ INSTALLATION

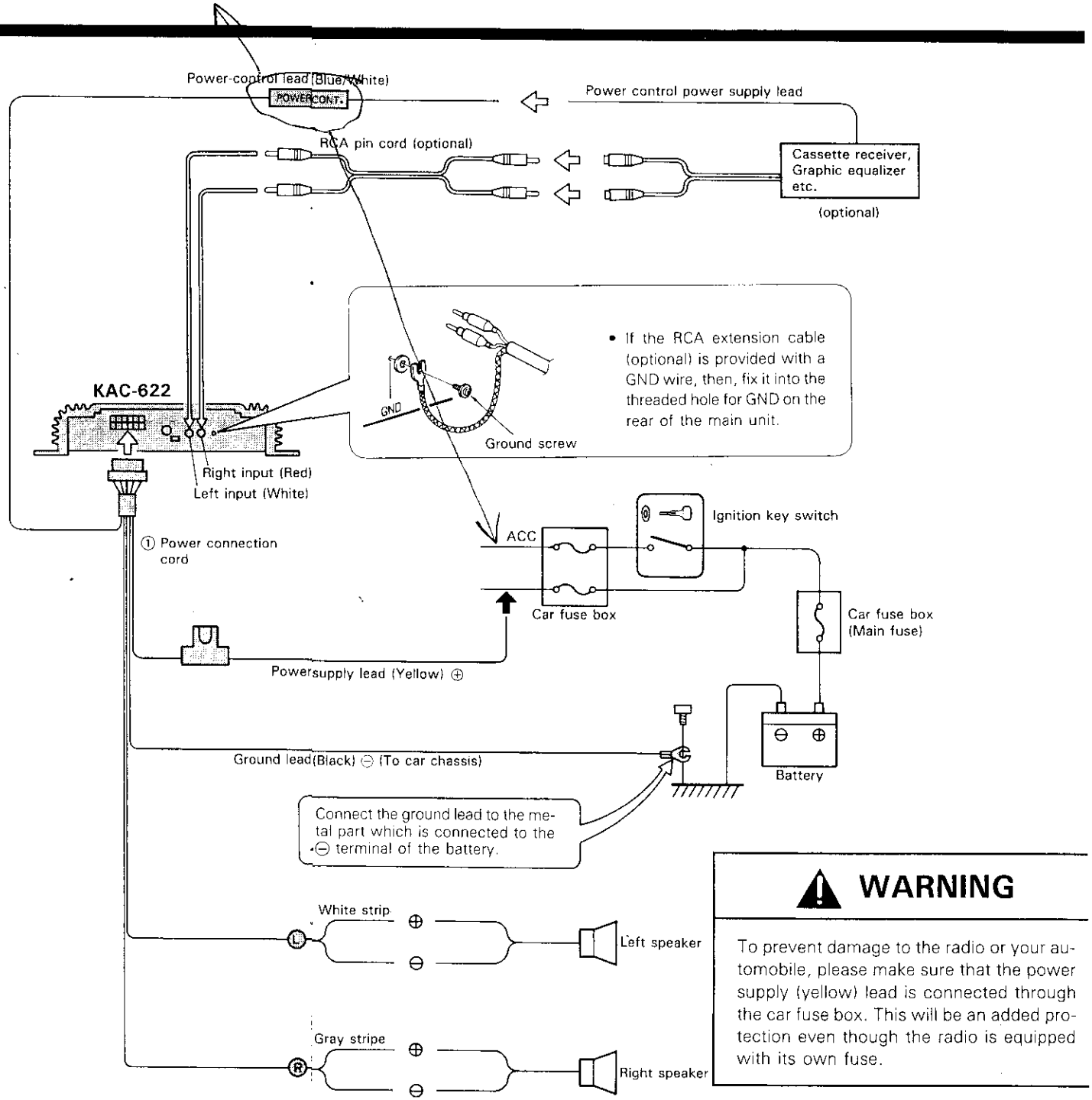
1. Before installation and wiring, remove the ⊖ terminal of the battery to prevent short-circuiting.
2. Connect the input and output cords of the system.
3. Connect the ground to the metal chassis of the car.
4. Connect the power supply lead (yellow).
5. Install the set and after confirming the installation and wirings are correct, connect the ⊖ terminal of the battery.



- If a fuse is blown, first check that the associated wires are not short-circuited then replace the fuse with a new one having the same capacity.

CAUTION

Always connect the without white stripe, gray stripe speaker wires to the ⊖ terminals of the speaker systems. Never let the ⊖ speaker wires touch and never connect them to the chassis (ground). Do not let the speaker terminals come into contact with the chassis (ground).
Insulate any unused output wire with vinyl tape to prevent a short circuit.

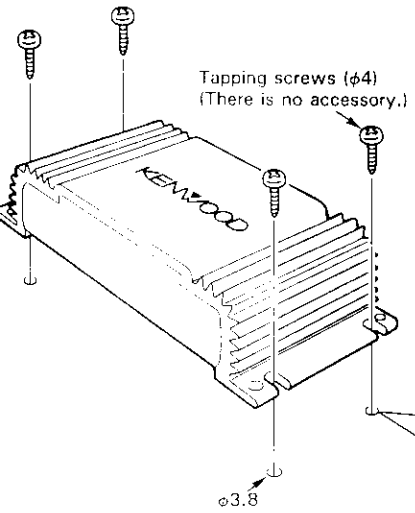

Power-control lead (Blue/White)
POWER CONT.
Power control power supply lead
RCA pin cord (optional)
Cassette receiver, Graphic equalizer etc.
(optional)
KAC-622
GND
Ground screw
• If the RCA extension cable (optional) is provided with a GND wire, then, fix it into the threaded hole for GND on the rear of the main unit.
Right input (Red)
Left input (White)
① Power connection cord
ACC
Ignition key switch
Car fuse box
Car fuse box (Main fuse)
Powersupply lead (Yellow) ⊕
Ground lead(Black) ⊖ (To car chassis)
Battery
Connect the ground lead to the metal part which is connected to the ⊖ terminal of the battery.
White strip
Left speaker
Gray stripe
Right speaker

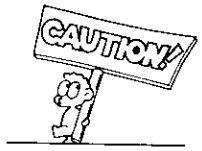
⚠ WARNING

To prevent damage to the radio or your automobile, please make sure that the power supply (yellow) lead is connected through the car fuse box. This will be an added protection even though the radio is equipped with its own fuse.

INSTALLATION

1. Installation

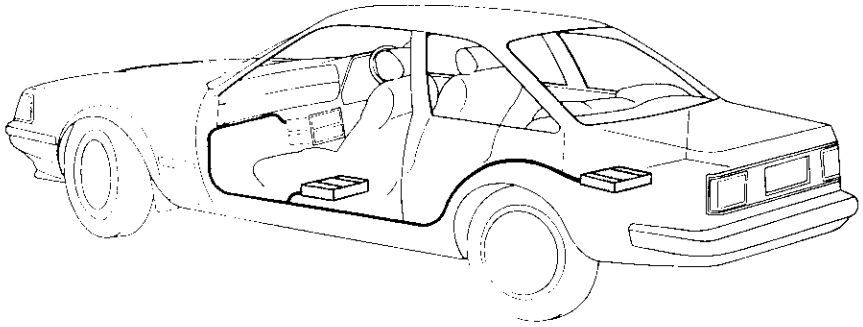




- When installing to the car, install the unit securely for safety driving.
- Install the unit in a well-ventilated place and do not place the (heavy) object on it.

CAUTION
When making the hole, do not damage the fuel tank, brake tube, wiring harnesses, etc. on the other side.

2. Installation location



- Since the power amplifier has no parts which require operation, it can be installed at a position away from the driver's seat without any hinderances.
  As generally accepted positions for its installation, places such as under the front seat or inside the trunk, etc. can be considered.
- Use the extension cables. CA-5W/3W (0.5 m), CA-15W/13W (1 m), CA-25W/23W (2 m), CA-45W/43W (4 m) and CA-65W/63W (6 m) (optional) when the connected models are to be installed away from the power amplifier.

TROUBLESHOOTING GUIDE

What often appears to be a malfunction is often due to user error in operation or connection When trouble occurs with your unit, please check the following before calling for service

Symptom	Cause	Remedy
The sound level is low. (No sound from one side.)	A speaker cord has become unconnected.	Check the speaker cord connections.
The sound quality is bad. (The sound is distorted.)	1. The speakers are connected to the same wires. 2. A speaker cord is pinched by a screw in the car body.	1. Connect each speaker terminal to its respective speaker output. 2. Check the speaker wiring.

SPECIFICATIONS

Specifications subject to change without notice.

Audio section

Max Power Output
- Normal (STEREO) ..... 60 W + 60 W
- Bridged (MONO) ..... 130 W

Power Output
- Normal (STEREO) (20 Hz ~ 20 kHz, 4 Ω, less than 0.08% THD) ..... 30 W + 30 W
- Bridged (MONO) (1 kHz, 4 Ω, 0.8% THD) ..... 80 W

Output Power
- Normal (STEREO) (1 kHz, 2 Ω, 0.8% THD) ..... 40 W + 40 W

Frequency Response (−3 dB) ..... 4 Hz ~ 65 kH
Signal to Noise Ratio ..... 100 d
Sensitivity (rated output) MAX. ..... 0.1 V
MIN. ..... 5.0 V
Input Impedance ..... 10 k
Damping Factor (100 Hz) ..... More than 10

General

Operating Voltage ..... 14.4 V (11 ~ 16 V allowable
Current Consumption (MAX.) ..... 15 A
Dimensions (W × H × D) ..... 203 × 48 × 140 mm
(8 × 1-7/8 × 5-1/2 in.
Weight ..... 1.6 kg (3.5 lb